Supplementary table: Clinical classification and complications definitions

Diagnostic criteria of COVID-19[10]	**Suspected Cases** The suspected cases should be diagnosed through considering both the epidemiological histories and clinical manifestations: Epidemiology 1. Having a history of travel or residence in Wuhan and its surrounding areas or other communities with cases reported within 14 days before the patient's onset; or 2. Having a contact history with patients (a positive results of nuclei acid test of SARS-CoV-2) within 14 days before the patient's onset; or 3. Having a contact history with patients with fever or respiratory symptoms from Wuhan and its surrounding areas, or the communities with cases reported within 14 days before the patient's onset; or 4. Clustering occurrence of cases. Clinical Manifestations 1. Fever and/or respiratory symptoms; 2. Having the imaging features of pneumonia described above; 3. In the early stage, a normal or decreased total white blood cell count and a decreased lymphocyte count can be found Patients who satisfy any one of the epidemiological exposure histories as well as any two of the clinical manifestations can be diagnosed as suspected cases. Patients with no definite epidemiological history can be diagnosed only if all the three clinical manifestations are met. **Confirmed Cases** The suspected cases with one of the following etiological evidences can be diagnosed as confirmed cases: 1. A positive result of the nucleic acid of SARS-CoV-2 by real-time fluorescence RT-PCR; 2. The virus gene sequence is highly homologous to the known SARS-CoV-2.
Mild cases[10]	The clinical symptoms are mild and no pneumonia manifestation can be found in imaging
Moderate cases[10]	Patients have symptoms like fever and respiratory tract symptoms, etc. and pneumonia manifestation can be seen in imaging
Severe cases[10]	Meeting any of the following: Respiratory distress, respiratory rates ≥30 breaths/minutes; The oxygen saturation ≤93% at a rest state; Arterial oxygen tension (PaO2) over inspiratory oxygen fraction (FIO2) ratio ≤300 mm Hg Patients with >50% lesions progression within 24 to 48 hours in pulmonary imaging should be treated as severe cases.

Critical ill cases[10]	Meeting any of the following: Respiratory failure occurs and mechanical ventilation is required; Shock occurs; Complicated with other organ failure that requires monitoring and treatment in ICU
Acute respiratory distress syndrome (ARDS)[11]	Onset: new or worsening respiratory symptoms within one week of known clinical insult. Chest imaging: bilateral opacities, not fully explained by effusions, lobar or lung collapse, or nodules. Origin of oedema: respiratory failure not fully explained by cardiac failure or fluid overload. Need objective assessment to exclude hydrostatic cause of oedema if no risk factor present. Oxygenation (adults): • Mild ARDS: 200 mmHg < PaO2/FiO2 ≤ 300 mmHg (with PEEP or CPAP ≥5 cmH2O, or non-ventilated) • Moderate ARDS: 100 mmHg < PaO2/FiO2 ≤200 mmHg with PEEP ≥5 cmH2O, or non-ventilated) • Severe ARDS: PaO2/FiO2 ≤ 100 mmHg with PEEP ≥5 cmH2O, or non-ventilated) • When PaO2 is not available, SpO2/FiO2 ≤315 suggests ARDS (including in non-ventilated patients)
Acute kidney injury[12]	Identified on the basis of the highest serum creatinine level according to the kidney disease improving global outcomes classification
Sepsis[11]	Adults: life-threatening organ dysfunction caused by a dysregulated host response to suspected or proven infection, with organ dysfunction. Signs of organ dysfunction include: altered mental status, difficult or fast breathing, low oxygen saturation, reduced urine output, fast heart rate, weak pulse, cold extremities or low blood pressure, skin mottling, or laboratory evidence of coagulopathy, thrombocytopenia, acidosis, high lactate or hyperbilirubinemia.
Septic shock[11]	Persisting hypotension despite volume resuscitation, requiring vasopressors to maintain mean artery pressure (MAP) ≥65 mmHg and serum lactate level >2 mmol/L.
Acute liver injury	Jaundice with a total bilirubin level of ≥ 3 mg/dl and an acute increase in alanine aminotransferase of at least five times the upper limit of the normal range and/or an increase in alkaline phosphatase of at least twice the upper limit of the normal range.
Acute heart failure[13]	Using age-related amino-terminal pro-brain natriuretic peptide cut-points of 450, 900, and 1800 pg/mL for ages <50, 50-75, and >75, which yielded 90% sensitivity and 84% specificity for acute heart failure.
Cardiac injury[8]	Serum levels of cardiac biomarkers (e.g. cardiac troponin I) were >

	the 99th percentile upper reference limit, or new abnormalities were shown in electrocardiography and echocardiography.

Abbreviations: CAPA, continuous positive airway pressure; COVID-19, coronavirus disease 2019; FIO2, fraction of inspired oxygen; ICU, intensive care unit; MAP, mean artery pressure; PaCO2, partial pressure of carbon dioxide; PaO2, partial pressure of oxygen; PEEP, positive end expiratory pressure; RT-PCR, reverse transcription-polymerase chain reaction; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2.